```
=> s tuberculosis and
((MTSP1) or (MTSP15) or (MTSP21) or (MTSP23) or (MTSP36) or (MTSP43) or (MTSP47) or (Rv0603) or (Rv1804c) or (Rv12
71c) or (Rv2253) or (Rv0203) or (Rv0617) or (Rv2290))
            10 TUBERCULOSIS AND ((MTSP1) OR(MTSP15) OR(MTSP21) OR(MTSP23) OR(MT
               SP36) OR(MTSP43) OR(MTSP47) OR(RV0603) OR(RV1804C) OR(RV1271C)
               OR (RV2253) OR (RV0203) OR (RV0617) OR (RV2290))
=> dup rem l1
PROCESSING COMPLETED FOR L1
              6 DUP REM L1 (4 DUPLICATES REMOVED)
=> d bib ab 1-
YOU HAVE REQUESTED DATA FROM 6 ANSWERS - CONTINUE? Y/(N):y
L2
     ANSWER 1 OF 6 USPATFULL on STN
AN
       2005:305853 USPATFULL
       High resolution typing system for pathogenic Mycobacterium tuberculosum
ΤI
       Keim, Paul S., Flagtaff, AZ, UNITED STATES
TN
       Spurgiesz, Robert Scott, Flagstaff, AZ, UNITED STATES
       Schupp, James M., Flagstaff, AZ, UNITED STATES
PΤ
       US 2005266492
                          A1
                               20051201
ΑI
       US 2005-181587
                          A1
                               20050713 (11)
RLI
       Division of Ser. No. US 2003-624714, filed on 21 Jul 2003, PENDING
                           20020719 (60)
PRAI
       US 2002-397224P
DT
       Utility
       APPLICATION
FS
       QUARLES & BRADY LLP, RENAISSANCE ONE, TWO NORTH CENTRAL AVENUE, PHOENIX,
LREP
       AZ, 85004-2391, US
       Number of Claims: 23
CLMN
       Exemplary Claim: 1
ECL
       3 Drawing Page(s)
DRWN
LN.CNT 1244
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       MLVA methods for strain discrimination among Mycobacterium tuberculosum
       strains are disclosed. Nine VNTR loci have been identified from genomic
       sequences of Mycobacterium tuberculosum strains and primer pairs
       suitable for amplifying the VNTR by PCR are disclosed. Polymorphisms at
       these loci were used to resolve genotypes into distinct groups. This
       sub-typing scheme is useful for the epidemiological study of
       Mycobacterium tuberculosum and may be applied to the local detection of
       the pathological causative agent of tuberculosum.
     ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
L2
     2005:11168 CAPLUS
AN
DN
     142:234084
TI
     Cloning and expression of multiple integral membrane proteins from
     Mycobacterium tuberculosis in Escherichia coli
     Korepanova, Alla; Gao, Fei P.; Hua, Yuanzi; Qin, Huajun; Nakamoto, Robert
ΑU
     K.; Cross, Timothy A.
     Department of Chemistry and Biochemistry, Florida State University,
CS
     Tallahassee, FL, 32306, USA
     Protein Science (2005), 14(1), 148-158
SO
     CODEN: PRCIEI; ISSN: 0961-8368
PB
     Cold Spring Harbor Laboratory Press
DT
     Journal
LA
     English
AΒ
     Seventy integral membrane proteins from the Mycobacterium
     tuberculosis genome have been cloned and expressed in Escherichia
     coli. A combination of T7 promoter-based vectors with hexa-His affinity
     tags and BL21 E. coli strains with addnl. tRNA genes to supplement
     sparsely used E. coli codons have been most successful. The expressed
     proteins have a wide range of mol. wts. and number of transmembrane helixes.
     Expression of these proteins has been observed in the membrane and insol.
```

fraction of E. coli cell lysates and, in some cases, in the soluble fraction. The highest expression levels in the membrane fraction were restricted to a narrow range of mol. wts. and relatively few transmembrane helixes. In contrast, overexpression in insol. aggregates was distributed over a broad

range of mol. wts. and number of transmembrane helixes.

RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 3 OF 6 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 1

AN 2005:167656 BIOSIS

DN PREV200500169558

TI Immunological characterization of novel secreted antigens of Mycobacterium tuberculosis.

AU Amor, Y. B.; Shashkina, E.; Johnson, S.; Bifani, P. J.; Kurepina, N.;

Kreiswirth, B.; Bhattacharya, S.; Spencer, J.; Rendon, A.; Catanzaro, A.;

- Gennaro, M. L. [Reprint Author]
 CS 225 Warren St, Newark, NJ, 07103, USA
 gennaro@phri.org
- SO Scandinavian Journal of Immunology, (February 2005) Vol. 61, No. 2, pp. 139-146. print.
 ISSN: 0300-9475 (ISSN print).
- DT Article
- LA English
- ED Entered STN: 4 May 2005 Last Updated on STN: 4 May 2005
- AΒ Proteins secreted by Mycobacterium tuberculosis are targets of host immune responses and as such are investigated for vaccine and immunodiagnostics development. Computer-driven searches of the M. tuberculosis H37Rv genome had previously identified 45 novel secreted proteins. Here, we report the characterization of these antigens in terms of specificity for the M. tuberculosis complex and the ability to induce human immune responses. BLAST homology searches and Southern hybridization identified 10 genes that were either specific for the M. tuberculosis complex or found in only two nontuberculous mycobacterial species of minor medical significance. Selected recombinant proteins were purified from Escherichia coli cells and tested for the ability to elicit antibody responses in tuberculosis patients. Reactivity of the serum panel was '36% with at least one of five novel proteins (Rv0203, Rv0603, Rv1271c, Rv1804c and Rv2253), 56% with the 38 kDa lipoprotein, a
 - M. tuberculosis antigen known to be highly seroreactive, and 68% with a combination of Rv0203, Rv1271c and the 38 kDa antigen. Thus, at least five novel secreted proteins induce antibody responses during active disease; some of these proteins may increase the sensitivity of serological assays based on the 38 kDa antigen.
- L2 ANSWER 4 OF 6 USPATFULL on STN
- AN 2004:254370 USPATFULL
- TI Comparative mycobacterial geneomics as a tool for identifying targets for the diagnosis, prophylaxis or treatment of mycobacterioses
- IN Cole, Stewart, Clamart, FRANCE
- PI US 2004197896 A1 20041007
- AI US 2004-468356 A1 20040412 (10)
 - WO 2002-IB1973 20020222
- RLI Division of Ser. No. US 2001-270123, filed on 22 Feb 2001, PENDING
- DT Utility
- FS APPLICATION
- LREP FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP, 1300 I STREET, NW, WASHINGTON, DC, 20005
- CLMN Number of Claims: 50
- ECL Exemplary Claim: 1
- DRWN 103 Drawing Page(s)
- LN.CNT 2647
- CAS INDEXING IS AVAILABLE FOR THIS PATENT.
- The present invention is directed to a method of selection of purified nucleotidic sequences or polynucleotides encoding proteins or part of proteins carrying at least an essential function for the survival or the virulence of mycobacterium species by a comparative genomic analysis of the sequence of the genome of M. tuberculosis aligned on the genome sequence of M. leprae and M. tuberculosis and M. leprae marker polypeptides of nucleotides encoding the polypeptides, and methods for using the nucleotides and the encoded polypeptides are disclosed.

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ANSWER 5 OF 6 USPATFULL on STN
L2
       2004:158567 USPATFULL
AN
       High resolution typing system for pathogenic Mycobacterium tuberculosum
ΤI
IN
       Keim, Paul S., Flagstaff, AZ, UNITED STATES
       Spurgiesz, Robert Scott, Flagstaff, AZ, UNITED STATES
       Schupp, James M., Flagstaff, AZ, UNITED STATES
PΙ
       US 2004121366
                          A1
                               20040624
ΑI
       US 2003-624714
                          A1
                               20030721 (10)
       US 2002-397224P
                          20020719 (60)
PRAI
       Utility
DT
FS
       APPLICATION
       QUARLES & BRADY LLP, RENAISSANCE ONE, TWO NORTH CENTRAL AVENUE, PHOENIX,
LREP
       AZ, 85004-2391
      Number of Claims: 17
CLMN
       Exemplary Claim: 1
ECL
DRWN
       3 Drawing Page(s)
LN.CNT 1061
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
      MLVA methods for strain discrimination among Mycobacterium tuberculosum
AB
       strains are disclosed. Nine VNTR loci have been identified from genomic
       sequences of Mycobacterium tuberculosum strains and primer pairs
       suitable for amplifying the VNTR by PCR are disclosed. Polymorphisms at
       these loci were used to resolve genotypes into distinct groups. This
       sub-typing scheme is useful for the epidemiological study of
       Mycobacterium tuberculosum and may be applied to the local detection of
       the pathological causative agent of tuberculosum.
L2
     ANSWER 6 OF 6 USPATFULL on STN
       2003:187811 USPATFULL
AN
       Comparative mycobacterial genomics as a tool for identifying targets for
ΤI
       the diagnosis, prophylaxis or treatment of mycobacterioses
       Cole, Stewart T., Clamart, FRANCE
IN
PΙ
       US 2003129601
                         A1
                               20030710
       US 2004121322
                          Α9
                               20040624
                               20020222 (10)
ΑÍ
      US 2002-80170
                         A1
                          20010222 (60)
PRAT
      US 2001-270123P
DT
      Utility
FS
      APPLICATION
LREP
       FINNEGAN, HENDERSON, FARABOW, GARRETT &, DUNNER LLP, 1300 I STREET, NW,
       WASHINGTON, DC, 20006
CLMN
      Number of Claims: 74
      Exemplary Claim: 1
ECL
DRWN
       3 Drawing Page(s)
LN.CNT 6691
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention is directed to a method of selection of purified
AB
       nucleotidic sequences or polynucleotides encoding proteins or part of
      proteins carrying at least an essential function for the survival or the
       virulence of mycobacterium species by a comparative genomic analysis of
       the sequence of the genome of M. tuberculosis aligned on the
       genome sequence of M. leprae and M. tuberculosis and M. leprae
```

marker polypeptides of nucleotides encoding the polypeptides, and methods for using the nucleotides and the encoded polypeptides are

disclosed.